



Chatham County Stormwater Permit Application

| FOR OFFICE USE ONLY | |
|---------------------|-------|
| Review Fee: | _____ |
| Permit No.: | _____ |
| Date Issued: | _____ |
| Date Paid: | _____ |
| Check No.: | _____ |
| Rec'd By: | _____ |

Section A. SUMMARY INFORMATION

DEVELOPMENT NAME: Chestnut Creek Subdivision

LOCATION: Jones Ferry Road

PARCEL ID NUMBER: 1439

TOTAL ACRES: 49.149 Acres TOTAL DWELLING UNITS (if applicable): 14

TOTAL Disturbed Area: 5.52 Acres % Built Upon Area: 11.23% TOTAL Built Upon Area: 65713 SF./ 1.51 Acres

Section B. APPLICANT INFORMATION

OWNER (Owner or Developer)

Owner: Kirk Metty Phone: 919-235-2077

Company: Tuscan Group, Inc Fax: _____

Address: 661 Cedar Grove Road

City, State: Pittsboro, North Carolina Zip: 27312

Email Address: tuscangroupinc@gmail.com

CONSULTANT (Person to contact regarding questions or revisions to the plan)

Contact Name: Samir Bahho Phone: 919-851-1642

Company: Civil and Structural Engineering Services Fax: _____

Address: 4612 Kaplan Drive,

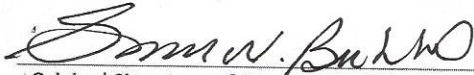
City, State: Raleigh, North Carolina Zip: 27606

Email Address: ba.casespllc@gmail.com

Section E. APPLICANT'S CERTIFICATION

Designer Certification:

I hereby certify that the design-related information submitted with this application for permit coverage was prepared under my direction or supervision and that the information is, in the exercise of my reasonable professional judgment, true, accurate and complete. I also hereby certify that the stormwater collection, treatment and control system design submitted with this application complies with all requirements of the County's Stormwater Ordinance.



Original Signature of Stormwater Designer

Civil Engineer

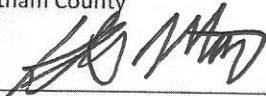
Title

Samir Bañho, PE

Type or Print Name

Owner Certification:

I hereby certify that I have read this application and agree to abide by the terms of any Stormwater Permit issued by Chatham County



Original Signature of Owner or Authorized Agent

PRESIDENT

Title

KIRK T. METTY

Type or Print Name

**ALL ITEMS ON THIS APPLICATION MUST BE ADDRESSED PRIOR TO SUBMITTAL.
ALL INCOMPLETE SUBMITTALS WILL BE RETURNED.**

Section C. REQUIRED ITEMS CHECKLIST

The following checklists outline submittal requirements. Initial in the space provided to indicate the following submittal requirements have been met and supporting documentation is attached.

| General Requirements: (Applicant's Initials) | | |
|--|-----|---|
| ✓ | 1. | Sheets shall be no larger than 36" x 24" plan and profile paper. |
| ✓ | 2. | Minimum text size shall be 1/8". |
| ✓ | 3. | Scale on plan view shall be no smaller than 1" = 50'; scale on profile view shall be no smaller than 1" = 50' horizontally and 1" = 5' vertically using a grid showing 1' intervals. |
| ✓ | 4. | All drawings to be in North Carolina State Plane coordinate system. |
| ✓ | 5. | Cover sheet shall have a vicinity map at a scale no smaller than 1" = 200'. |
| ✓ | 6. | Provide a legend indicating existing and proposed lines, features and symbols. |
| ✓ | 7. | Cover sheet shall include all general notes, owner's name, telephone number, and mailing address. |
| ✓ | 8. | All elevations shall be given in relation to mean sea level; elevations in profile view shall be labeled in 10' intervals on the heavy lines (Ex. 350, 360). |
| ✓ | 9. | Benchmark elevations and locations shall be shown on plan view. |
| ✓ | 10. | Plan views shall have a north arrow on each drawing. |
| ✓ | 11. | Each drawing shall have the following information in the title block: Street or project title, limits, horizontal and vertical scales, original date, revisions date, drawing number, checked by and drawn by. Recommended placement is lower right-hand corner. |
| ✓ | 12. | All drawings sealed, signed and dated by a NC Professional Engineer or Landscape Architect. |
| ✓ | 13. | A signed and sealed statement on the plans certifying that the design of all stormwater management facilities and practices will control and treat the runoff from the from the 1 year-1hour storm over the total drainage area, that the designs and plans are sufficient to comply with applicable standards and policies found in the <i>NC DENR Stormwater BMP Design Manual</i> , and that the designs and plans ensure compliance with the County's Stormwater Ordinance. |
| ✓ | 14. | Plan view shall show all actual street names. State road numbers shall be shown if applicable. Plan view should also indicate whether street is asphalt, concrete, gravel or dirt. Proposed street & Right-of-way widths will be dimensioned back-to-back and labeled in plan view. |
| ✓ | 15. | Plan view shall show proposed and existing curb and gutter, pavement, storm sewers, drainage structures, driveway pipes, water mains, sanitary sewer mains, etc. All available elevations shall be shown on the profile view. Direction of flow shall be shown on plan view for all sanitary sewers and storm drains. Materials and pipe sizes shall be labeled. |
| ✓ | 16. | Existing utility lines shall be shown and labeled on plan view and indicated in the legend. |
| ✓ | 17. | Plans shall show final proposed locations and dimensions of all water, storm drain, and sanitary sewer lines, devices to be installed on the system, catch basins, culverts, ditches, including grades, pipes sizes, elevations, assumptions, calculations, invert elevations for all inlets and manholes and profiles of sanitary sewer lines. |

| | | |
|---|-----|--|
| ✓ | 18. | All existing and proposed water, storm drainage and sanitary sewer easements shall be shown on all applicable sheets. |
| ✓ | 19. | Number of dwelling units. |
| ✓ | 20. | Existing and proposed topographic lines (minimum 2-foot intervals). |
| ✓ | 21. | Streams, ponds, wetlands, etc. on the project site and within 50 feet of the property lines. |
| ✓ | 22. | Location of floodplain and floodway (if applicable). |
| ✓ | 23. | Location of drainage ways and easements. |
| Site Drainage Features: | | |
| ✓ | 24. | Existing and planned drainage patterns (include off-site areas that drain through project). |
| ✓ | 25. | Any existing stormwater control systems. |
| ✓ | 26. | Sub-watershed delineation showing drainage areas. |
| ✓ | 27. | Show extent and number of disturbed acres. |
| ✓ | 28. | Proposed built-upon areas. |
| ✓ | 29. | Soil information: type, special characteristics. |
| ✓ | 30. | Name and classification of receiving water course. |
| Permanent Stormwater Control Measures: | | |
| ✓ | 31. | Type of BMP (wet pond, rain-garden, etc). |
| ✓ | 32. | Designer's certification. |
| ✓ | 33. | Narrative description of proposed stormwater system (where runoff originates (e.g. roofs, roads, parking lots etc.), its conveyance within the project, its treatment, and its conveyance from the project to the receiving water body). |
| ✓ | 34. | Profile along the centerline of the principal spillway/outfall pipe extending below the protected outfall or to the downstream structure. |
| ✓ | 35. | Elevations of the "water quality" surface, temporary storage water surface, and the 10 and 100 year storms. |
| ✓ | 36. | Stage-storage table for each BMP. |
| ✓ | 37. | If BMP is to be used to treat construction site runoff, provide steps necessary to restore BMP to original design condition. |
| ✓ | 38. | All necessary construction specifications. |
| ✓ | 39. | Sequence of construction. |
| ✓ | 40. | Individual drainage areas for each stormwater BMP. |
| ✓ | 41. | Construction drawings and details for permanent measures. |

| | | |
|---|-----|---|
| ✓ | 42. | Size and location of culverts. |
| ✓ | 43. | Size and location of subsurface drainage conveyances. |
| ✓ | 44. | Disclosure of party ultimately responsible for operation and maintenance of the stormwater system. |
| Stormwater Calculations: | | |
| ✓ | 45. | Narrative description of calculations (methods, variables, assumptions, etc.) and results. Include the BMP Supplement Forms from the North Carolina Department of the Environment and Natural Resources-Division of Water Quality's <i>Manual of Stormwater Best Management Practices</i> (NCDENR BMP Manual) for each BMP. |
| ✓ | 46. | Stormwater BMPs designed in accordance with the NCDENR BMP Manual. |
| ✓ | 47. | Time of concentration for pre/post development conditions. |
| ✓ | 48. | Pre-construction and post-construction runoff calculations for each outlet from the site (at peak discharge points). |
| ✓ | 49. | Pre-construction and post-construction design calculations and hydrographs. |
| ✓ | 50. | Design calculations of culverts and storm sewers. |
| ✓ | 51. | Discharge and velocity calculations for open channel and ditch flows (easement & right-of-ways). |
| ✓ | 52. | Design calcs of cross sections and method of stabilization of existing and planned channels (include temporary linings). |
| ✓ | 53. | Design calcs and construction details of energy dissipaters below culvert and storm sewer outlets (diameters & apron dimensions). |
| ✓ | 54. | Amount and type of existing and proposed land use. |
| Operation and Maintenance Manual (for each BMP): | | |
| ✓ | 55. | Narrative description of the purpose and operation of the BMP. |
| ✓ | 56. | Detailed list, description, and procedure of routine maintenance items. |
| ✓ | 57. | Detailed list, description, and procedure of non-routine maintenance items. |
| ✓ | 58. | Maintenance schedule. |
| ✓ | 59. | Steps needed to restore BMP in the event of a failure. |
| ✓ | 60. | Maintenance checklist and inspection form. |
| ✓ | 61. | BMP construction drawings. Replace with record drawings when BMP is complete. |
| ✓ | 62. | Latitude and longitude of each stormwater BMP. |

Section D. ATTACHMENTS

- 2 sets of plans
- 1 set of electronic plans in .pdf format
- 1 set of calculations
- Operation and Maintenance Manual
- Application Fee